

For the Examiner's convenience, a complete listing of the claims is listed below.

10. (Previously Amended): An isolated antibody which specifically binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3.

29. (Original): A diagnostic test for a condition or disease associated with the expression of HMRP in a biological sample comprising the steps of:

- a) combining the biological sample with an antibody of claim 10, under conditions suitable for the antibody to bind the polypeptide and form an antibody:polypeptide complex; and
- b) detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.

30. (Original): The antibody of claim 10, wherein the antibody is:

- a) a chimeric antibody,
- b) a single chain antibody,
- c) a Fab fragment,
- d) a F(ab')₂ fragment, or
- e) a humanized antibody.

31. (Original): A composition comprising an antibody of claim 10 and an acceptable excipient.

32. (Original): A method of diagnosing a condition or disease associated with the expression of HMRP in a subject, comprising administering to said subject an effective amount of the composition of claim 31.

33. (Original): A composition of claim 31, wherein the antibody is labeled.

34. (Original): A method of diagnosing a condition or disease associated with the expression of HMRP in a subject, comprising administering to said subject an effective amount of the composition of claim 33.

35. (Previously Amended): A method of preparing a polyclonal antibody with the specificity of the antibody of claim 10 comprising:

- a) immunizing an animal with a polypeptide having an amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3, or an immunogenic fragment thereof, under conditions to elicit an antibody response;
- b) isolating antibodies from said animal; and
- c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which binds specifically to a polypeptide having an amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3.

36. (Original): An antibody produced by a method of claim 35.

37. (Original): A composition comprising the antibody of claim 36 and a suitable carrier.

38. (Previously Amended): A method of making a monoclonal antibody with the specificity of the antibody of claim 10 comprising:

- a) immunizing an animal with a polypeptide having an amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3, or an immunogenic fragment thereof, under conditions to elicit an antibody response;
- b) isolating antibody producing cells from the animal;
- c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells;
- d) culturing the hybridoma cells; and
- e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide having an amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3.

39. (Original): A monoclonal antibody produced by a method of claim 38.

40. (Original): A composition comprising the antibody of claim 39 and a suitable carrier.

41. (Original): The antibody of claim 10, wherein the antibody is produced by screening a Fab expression library.

42. (Original): The antibody of claim 10, wherein the antibody is produced by screening a recombinant immunoglobulin library.

43. (Original): A method for detecting a polypeptide having an amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3 in a sample, comprising the steps of:

- a) incubating the antibody of claim 10 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and
- b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide having an amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3 in the sample.

44. (Original): A method of purifying a polypeptide having an amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3 from a sample, the method comprising:

- a) incubating the antibody of claim 10 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and
- b) separating the antibody from the sample and obtaining the purified polypeptide having an amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3.